Why LEED™: The Colorado Experience

Feb 12th, 2004 Westminster

Joan Gregerson, Consultant Governor's Office of Energy Management and Conservation

joang@niwotcolo.com

303-652-9997





Rebuild Colorado's mission

Better buildings
through energy and
water efficiency
improvements

Free services for state and local governments





Free services and expertise

- Energy Performance Contracting
- High Performance Design
- Commissioning
- ...and more!







Why high performance design? ...Reports from the field

The efficiency of some schools built in the late 1990's was disappointing.

Why?

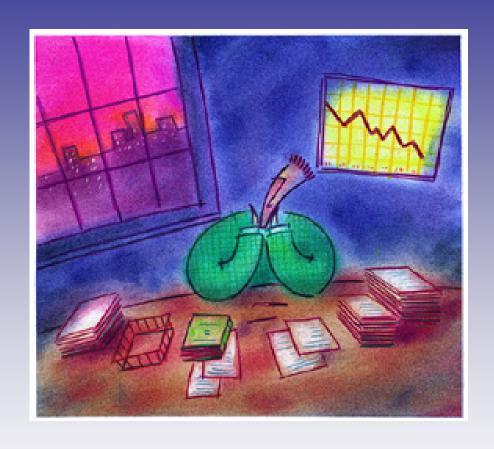
What went wrong?





Hmmm....
We need different results

We need a new process!







To get different results, we need to do things differently....

- Use integrated design, not "architect down"
- Use energy modeling from the beginning
- Use commissioning
- Use life-cycle rather than first cost for decisions
- Set energy & water performance targets
- Model exemplary projects
- Focus on occupant comfort & productivity
- Focus on flexibility and durability





Poudre School District

Zach Elementary Bacon Elementary











Poudre School District

Fossil Ridge High School











Results...

- ✓ Great learning environments
- ✓ Pay about 2% more in design fees
- ✓ Typical construction budget
- ✓ Utility bills half that of some new schools in Colorado





More High Performance Design Leaders in Colorado

- Adams 12 Five Star Schools
 Elementary 30
- American Century
- City of Fort Collins
 Harmony Library
- Colorado School of Mines
 Center for Tech. and Learning Media
- Northwest Colorado Water Conservancy District
- Summit School District
 Silverthorne Elementary
- University of Colorado
 UMC Addition









2% Average Cost Premium to Achieve LEED

- Executive order required "cost-effective" sustainable design for CA state agencies
 - Oct 2003 report for 40 state agencies
 - 33 LEED buildings in the US
- Findings:
 - average of 2% cost premium to achieve LEED
 - 10 to 1 benefit to cost ratio
 - cost-effective way to address state challenges



free download:

www.usgbc.org/docs/news/news477.pdf

Encouraging high performance design

US Green Building Council's LEED™ rating system

- Recognized standard
- Provides a framework for good design
- Encourages inclusion of cost-effective energy efficient and environmentally sound features





Rebuild Colorado High Performance Design Grants

- New in 2003
- Grants for Demonstration
 Projects in High Performance
 Design using LEED™
- \$200,000 available





Rebuild Colorado High Performance Design Grants

Grant can be used to pay for Integrated design services

- facilitating integrated design meetings
- introducing team to LEED scorecard
- setting performance targets
- and more





Rebuild Colorado High Performance Design Grants

- Eight \$20,000 grants awarded to date
- More requests in the queue
- Stay tuned...
 more grants may be available July 2004





High Performance Design Grant 2003-2004 Recipients

State

 Colorado Department of Labor and Employment

Local govt/non-profit

- Children's Museum of Durango in collaboration with the City of Durango
- Town of Snowmass

K-12 Schools

- Academy of Charter Schools
- Cheyenne Mountain School District
- Ouray County School District
- Peyton School District
- Weld County RE-5J School District
- West End School District





More projects underway... Colorado LEED Registered Projects

- Aspen Skiing Company
- City of Fort Collins
- CH2M Hill
- Children's Hospital
- Children's Museum of Durango with the City of Durango
- Colorado College
- Colorado Department of Labor & Employment
- Colorado Mountain College
- Colorado State University
- Continuum
- Denver Place with Ameriman Realty Company of Colo for EPA

- Mile High Properties
- National Renewable Energy Laboratory
- Pikes Peak Regional Development Center
- Pioneer School for Expeditionary Learning
- Poudre School District
- U.S. Department of Transportation
- U.S. General Services Administration
- University of Denver
- Vail Christian High School



More info: www.usgbc.org/leed



LEED Certified Buildings in Colorado

- Aspen Skiing Company: Sundeck Restaurant
- City of Boulder: North Boulder Recreation Center
- CH2M Hill: South Building
- Boulder Community Foothills Hospital
- CH2M Hill: West Building



More info: www.usgbc.org/leed



Why LEED: The Colorado Experience

Panel:

- Bill Boyes, City of Boulder
 North Boulder Recreation Center (LEED Silver)
- Ed Holder, Poudre School District

 Zach and Bacon Elementary (sustainable design) and Fossil Ridge HS (LEED registered)
- Kai Abelkis, Boulder Community Hospital Foothills Campus (LEED Silver)
- Dave Witte, DTC/Meridian
 CH2M Hill Offices (LEED Certified)



